

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	Oonk et al.	Examiner:	Ngoc Yen M. Nguyen
Serial No.:	10/552.311	Group Art Unit:	1793
Confirmation No:	6644	Docket:	294-229 PCT/US/RCE
Filed:	October 7, 2005	Dated:	February 17, 2009
For:	PURIFICATION OF OFF-GASES FROM GAS-FIRED PLANTS		

Commissioner for Patents
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Barbara Evers

(Printed Name)

Signature: /Barbara Evers/

DECLARATION UNDER 37 C.F.R. § 1.132

Sir:

1. I, Yves Creijghton, am a co-inventor of the invention disclosed and claimed in the above-identified patent application, and an expert in atmospheric pressure plasma chemical applications.
2. I am currently employed as senior research scientist at the Netherlands Organisation for Applied Scientific Research. My educational background is applied physics with a specialisation in transient atmospheric pressure plasma phenomena (Pulsed Corona Discharges, PhD at University of Technology Eindhoven).
3. I am familiar with the prosecution history of this application. I have reviewed the office action pending in the above-referenced application and the cited reference, U.S. Patent No. 6,357,223 to Caren, et al.
4. Caren, et al. disclose a plasma with a frequency of about 1 kHz to about 250 kHz. Additionally, Caren, et al. require the use of high frequency, high voltage power for operation of the corona discharge device.


5. The high frequency, high voltage power required for the corona discharge device in Caren, et al. cannot produce plasma capable of reducing the methane content in an off-gas stream of a gas-fired plant of the present invention. Specifically, the plasma of the invention must be effective for use with off-gas produced by combustion of natural gas in a natural gas engine for combined heat and power generation.

6. The use of low frequencies, *i.e.*, below 1 kHz, according to the claims allow for an effective *in situ* treatment of a gas stream in a natural gas engine for combined heat and power generation according to the method of the present invention, *e.g.*, by using large electrode structures.

7. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. Further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application of any patent issued thereon.

Respectfully submitted,

Dated: February 17, 2009


Yves Creighton